CLAIMS

1. A fire-stop device for protecting walls or structures or for producing a protective chamber, characterized in that it comprises an insulating composition suitable for covering the structure to be protected, or for surrounding the protective chamber covered by a surface coating comprising a mixture of potassium and lithium silicates and fine aluminum particles.

2. The fire-stop device as claimed in claim 1, characterized in that the aluminum particles have the shape of lamellae.

3. The fire-stop device as claimed in claim 2, characterized in that the aluminum lamellae have a thickness of about 0.2 µm and an average size (length and width) of between 10 and 15 µm, and preferably 13 µm.

4. The fire-stop device as claimed in one of claims 1 to 3, characterized in that the surface coating comprises about 15 to 20% by weight of aluminum particles, related to the weight of potassium silicate.

5. The fire-stop device as claimed in one of claims 1 to 4, characterized in that the surface coating comprises a suspending agent for ensuring the stability of the solution while it is being sprayed onto the insulating composition.

6. The fire-stop device as claimed in one of claims 1 to 5, characterized in that the coating layer thickness is 1 mm or less.

7. The fire-stop device as claimed in one of claims 1 to 6, characterized in that the insulating

composition comprises the following elements: gray cement, chalk, silica, hollow insulating materials and wet-strength agent.

8. The fire-stop device as claimed in one of claims 1 to 6, characterized in that the insulating composition comprises a hydraulic binder comprising the following elements: aluminosulfate clinker, crushed gypsum, lithium carbonate, borax or trisodium citrate.

9. The fire-stop device as claimed in claim 8, characterized in that the hydraulic binder has the following composition:

- aluminosulfate clinker: 75%
- crushed gypsum: 25%
- lithium carbonate: 0.5 to 1‰
- borax or trisodium citrate: 2 to 5‰

10. The fire-stop device as claimed in one of claims 1 to 6 and 8 and 9, characterized in that the insulating composition comprises, on the one hand, a substantially equal parts mixture of gray cement and hydraulic binder comprising the following elements: aluminosulfate clinker, crushed gypsum, lithium carbonate, borax or trisodium citrate and, on the other, the following elements: chalk, silica, hollow insulating materials and wet-strength agent.

11. The fire-stop device as claimed in one of claims 1 to 6 and 8 and 9, characterized in that the insulating composition comprises the following elements: aluminosulfate clinker, crushed gypsum, lithium carbonate, borax, chalk, silica, hollow insulating materials and wet-strength agent.

12. The fire-stop device as claimed in one of claims 7 to 11, characterized in that the insulating composition contains at least one flow and adhesion

promoter.

13. The fire-stop device as claimed in one of claims 7 to 12, characterized in that the insulating composition contains hollow insulating materials consisting of a mixture of glass microspheres (noblite) about 50 to 60 µm in diameter and expanded fired silica spheres (perlite) about 500 to 600 µm in diameter.

14. The fire-stop device as claimed in one of claims 7 to 13, characterized in that the insulating composition contains an element that improves its intrinsic strength and moistureproofing agent, consisting of a siliconate fixed to a porous filler.

15. The fire-stop device as claimed in claim 12, characterized in that the flow and adhesion promoter consists of cellulose ether.

16. The fire-stop device as claimed in claims 7 to 15, characterized in that the insulating composition has the following weight composition per 988 parts:

- gray cement and/or hydraulic binder	450
- chalk	50
- silica	350
- hollow materials	80
- expanded fired silica	30
- siliconate	25
- cellulose ether	3

17. The fire-stop device as claimed in one of claims 7 to 16, characterized in that the insulating composition is used as a coating with a thickness of between about 1.5 cm for a steel structure and 5 cm for a concrete structure.

18. The fire-stop device as claimed in claims 1 and 11, characterized in that it is formed from elements

molded using the insulating composition of claim 11.

19. The fire-stop device as claimed in claim 18, characterized in that the molded elements consist of sections of chutes (3) and sections of lids (4) of which the ends have complementary interlocking profiles (5, 6) for producing a continuous channel (2) with a constant wall thickness.